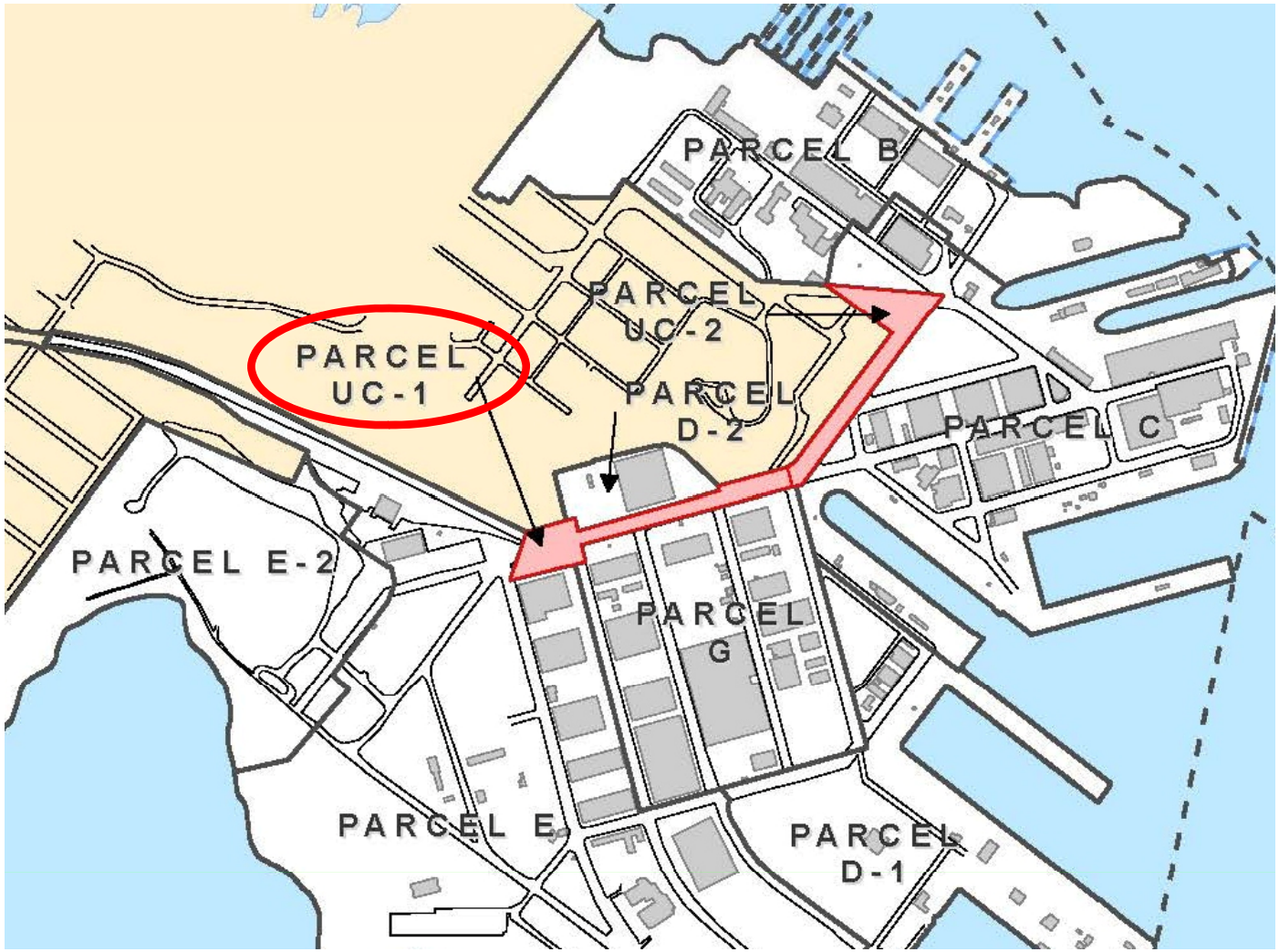
Parcel UC-1 Soil Vapor Investigation Update



Presentation Overview

- **Response to comments on Draft Soil Gas Investigation WP Addendum**
- **Project Schedule**

Review of UC-1 ROD Requirements

Craig Cooper, USEPA; General Comment 1

Depth of the soil gas samples

Proposed - minimum of eight inches below the existing hardscape and a maximum of two feet above the water table.

- Question 1 - What actions will be taken if the depth to groundwater is found to be within two feet of the minimum depth?

- Question – What is the expected depth of groundwater at Parcel UC-1?

Plan for Delineating and Evaluating Soil Vapor Risk in Parcel UC-1

Navy Response

Samples will be collected at a minimum depth of at least 8 inches below the existing hardscape, which includes the asphaltic concrete layer and the aggregate base foundation layer, to ensure results are representative of subsurface conditions. Samples will also be collected at a maximum depth of at least 2 feet above the water table to avoid interferences associated with the capillary fringe. If groundwater elevations are such that these constraints cannot be achieved, then the sample will be collected as close to the hardscape elevation as possible to minimize the risk of interferences associated with sample collection within the capillary fringe."

Plan for Delineating and Evaluating Soil Vapor Risk in Parcel UC-1 *(cont.)*

Craig Cooper, USEPA; Specific Comment 1

Rationale for using LOQ instead of PAL when LOQ is greater than PAL

Question - Why using a value greater than the PAL (i.e., the LOQ) is considered sufficient to make decisions that will still meet project data quality objectives (DQOs)?

Summary of soil vapor probe installation, sampling, and analysis procedures

Navy Response

The attainable LOQ for the selected laboratory method is greater than the PAL assigned based on the remediation goal, but the associated LOD is less than that PAL. If the analyte is detected between the LOQ and LOD, it will be reported as an estimated value with a "J" qualifier. For the purposes of this study, estimated values are acceptable for decision-making because the decision being made (i.e., to further evaluate a grid cell to determine if it should be included or excluded from the future ARIC) is dependent on the presence or absence of an analyte in soil gas at concentrations exceeding its SGAL.

Plan for Delineating and Evaluating Soil Vapor Risk in Parcel UC-1 *(cont.)*

Amy Brownell, SFDPH; Specific Comment 2

Updating of SGALs

Comment - SGALs should be updated based on currently available toxicity data.

Summary of soil vapor probe installation, sampling, and analysis procedures

Navy Response

To fulfill the requirements of the Final ROD for Parcel UC-1 (Navy, 2009), the Navy conducted soil vapor surveys to support the development of the SGALs presented in the "Revised Final Memorandum, Approach for Developing Soil Gas Action Levels for Vapor Intrusion Exposure at Hunters Point Naval Shipyard" (ChaduxTt, 2011). The SGALs presented in the aforementioned document are considered to be the final remediation goals for contaminants of concern in soil gas. These SGALs have been and will continue to be used to support the soil gas evaluations in all HPNS parcels. The Navy does not believe that it is necessary to reevaluate the established SGALs each time it performs an investigation, given that the SGALs are used to perform an initial risk-based screening of soil gas data.

Soil Vapor Investigation Sampling Schedule

Final SVI Work Plan Addendum	Sep 26, 2013
Utility and Land Surveys	Sep 25 - Sep 26, 2013
Install SVI Sampling Probes	Oct 7 – Oct 8, 2013
Soil Gas Sample Collection	Oct 10 – Oct 11, 2013
Lab analysis and Data Validation	Oct 14 – Nov 15, 2013
Draft SVI Tech Memo	Jan 15, 2014
Final SVI Tech Memo	Apr 4, 2014
Draft UC-1/2 RACR Amendment	Apr 28, 2014
Final UC-1/2 RACR Amendment	Jul 8, 2014